

TI-CMX

Ultrasonic Coating & Wall Thickness Gauge

The new CHECKLINE® TI-CMX measures both coating and wall thickness quickly and accurately—*from only one side.*

In addition, when switched to Pulse-Echo mode, the TI-CMX automatically measures and eliminates the coating from the wall thickness measurement, enabling the user to locate the finest corrosion and pitting without removing the coating.

Oversized graphic LCD is backlit and features easy to read fonts, graphics and display codes showing all critical settings including Velocity, Operating Mode, Alarms, Scan Mode and more. Five user-selected operating modes are included:

Coating On

Measures wall thickness using Pulse-Echo. It separately displays wall & coating thickness.

Coating Off

Measures wall thickness using Pulse-Echo. It displays wall thickness only.

Temperature Compensated

Measures wall thickness using Pulse-Echo and automatically adjusts calibration to compensate for changes in material temperature

Thru-Coat

Measures wall thickness only using Echo-Echo. (coating is NOT included)

Coating Only

Measures coating thickness only.

Features

- Auto probe recognition with Auto Zero or Manual Zero.
- Wide variety of dual-element probes can be used for nearly any application.
- Bar graph with user-set start end values providing highest resolution around the target thickness value.
- Differential Mode allows user to set a "target thickness value" and display will show the DIFFERENCE between actual and target thickness as a plus or minus value.
- Adjustable Gain in 5 steps (VLow, Low, Med, Hi & VHi) in 2db increments providing a 8 db gain adjust range (42–50 db).
- 64 custom setups can be stored and retrieved for convenient use and labeled for easy identification.
- Display Hi/Lo Alarm Limits with audible and visual indicators.
- CE Certified.
- Includes NIST-Traceable Calibration.
- 2-Year Warranty.
- Metal housing provides strong protection against harsh enviroments.

MEAS

ESC

QN

OFF

CHECK-LINE

CLE

MENU

LICO

TI-CMX automatically measures and eliminates the coating from wall thickness measurements, allowing users to locate the finest corrosion and pitting.

Specifications

Range in Steel Pulse-Echo Mode: Pit and Flaw detection measures from 0.025-9.999 inches (0.63 to 254mm) Echo-Echo Mode Thru Paint & coatings measures from 0.100 - 4.000 inches (2.54 to 102mm) Range will vary depending on the thickness of the coating. Resolution .001 inches (0.01mm) .0492 to .3936 in/µsec 1250 to 9999 meters/sec **Velocity Range** Units Inch or mm Measurement Modes Pulse-Echo (corrosion mode) Pulse-Echo Coating (Corrosion w/o coating) Echo-Echo (thru-paint) Temp Comp (auto adjust for material temp) Coating Only (Ultrasonic Coating Gauge) Dual Element (1 to 10 MHz). **Transducer Types** Output RS-232 for upload/download of setups

Memory Capacity	TI-CMX: none TI-CMXDL: over 200,000 measurements
Power Source	Three 1.5V alkaline or 1.2V NiCad AA cells
Battery Life	Typically operates for 150 hours on alkaline and 100 hours on NiCad
Auto Power Off	After 5 minutes of non-use
Display	1/8 in. VGA grayscale display 62 x 45.7mm
Keyboard	Membrane switch with twelve tactile keys
Case	Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed).
Operating	
Temperature	-14° to 140°F (-10° to 60°C)
Weight, net	383 grams
Dimension	63.5 W x 165 H x 31.5 D mm
Warranty	2 year limited
Certification	CE Approved, Factory calibration traceable to national standards

Hi-Speed Scan Mode



V: 0.2330 IN SCAN MED THK: 0.400 COAT: 0.035 MIN: 0.400 MAX: 0.500 **B-SCAN** 0.00 0.40 0.60 0.80 1.00 +++++ 0.20 0.40 0.60 0.80

B-Scan Mode

The B-Scan displays a time based cross section view of test material of the contour of the blind, or underside of a pipe or tank application. the B-Scan view draws at a rate of seven seconds per screen from right to left.

CHECK-LINE®-PRECISION QUALITY CONTROL INSTRUMENTS Toll Free: (800) 645-4330 (USA & Canada) **Electromatic Equipment Co., Inc.** info@checkline.com Email: 600 Oakland Ave. Tel: (516) 295-4300 Website: www.checkline.com Fax: (516) 295-4399 Cedarhurst, NY 11516 – USA FOR ADDITIONAL INFORMATION OR TO PLACE AN ORDER CALL TOLL FREE 1-800-645-4330

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Complete Kit

Bulletin #UT-705

The TI-CMX is supplied as a complete kit with the gauge, probe, 4 oz. bottle of coupling fluid, 2 AA batteries, NIST Calibration Certificate, operating manual, RS-232 cable and software ---all in a foam-fitted carrying case.

Options & Accessories

Protective Holder for Ultrasonic Gauges

- Constructed from heavy duty Cordura Nylon
- Includes wrist & shoulder straps

Steel Test Block

- 3 Sizes Available
- Precision Machined and Finished
- Includes NIST Report and Test Data



Coupling Fluid

• Used to create an ultrasonic

coupling between the probe

and material tobe measured

Scan Mode measures 64 times per second, displaying the max and min reading measured during the scan interval. Sample rate is 200/sec when coating measurement is off.